This document provides pertinent information concerning the issuance of the VPDES Permit listed below. This permit is being processed as a Minor, Industrial permit. The discharge is the result of daily operations and stormwater runoff from a commercial truck stop's diesel fueling islands. This permit action consists of proposed effluent limits to reflect the current Virginia WQS, effective 6 January 2011. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9VAC25-260 et seq.

	ility Name and Mailing dress:	Arogas, Inc. d.b.a. Mr. Fuel P.O. Box 580 St. Peters, MO 63376	SIC Code:	5541 – truck stop with convenience store
Fac	ility Location:	23818 Rogers Clark Boulevard Ruther Glen, VA 22546	County:	Caroline
Fac	ility Contact Name:	Kevin Manning	Telephone Number	er: 636-974-0255
2. Pen	mit No.:	VA0092649	Expiration Date:	Not Applicable
Oth	er VPDES Permits:	Not Applicable		
Oth	er Permits:	Registration ID 3024045 – Undergrou	and Storage Tanks (US	STs)
E2/1	E3/E4 Status:	Not Applicable		
3. Ow	ner Name:	Arogas, Inc. d.b.a. Mr. Fuel		
Ow	ner Contact / Title:	Kevin Manning / Vice President	Telephone Number	er: 636-974-0255
<b>4.</b> App	olication Complete Date:	11 November 2011		
Pen	mit Drafted By:	Douglas Frasier	Date Drafted:	10 February 2012
Dra	ft Permit Reviewed By:	Alison Thompson	Date Reviewed:	17 February 2012
WP	M Review By:	Bryant Thomas	Date Reviewed:	28 February 2012
Pub	lic Comment Period:	Start Date: 7 April 2012	End Date:	7 May 2012
5. Rec	eiving Waters Information:			
Rec	eiving Stream Name:	Reedy Creek, UT	Stream Code:	8-XJQ
Dra	inage Area at Outfall:	0.005 square miles	River Mile:	0.16
Stre	eam Basin:	York River	Subbasin:	None
Sect	tion:	3	Stream Class:	III
Spe	cial Standards:	None	Waterbody ID:	VAN-F21R
7Q1	10 Low Flow:	0.0 MGD*	7Q10 High Flow:	Not Applicable**
1Q1	10 Low Flow:	0.0 MGD*	1Q10 High Flow:	Not Applicable**
30Q	210 Low Flow:	0.0 MGD*	30Q10 High Flow:	Not Applicable**
Har	monic Mean Flow:	0.0 MGD*	30Q5 Flow:	Not Applicable**
303	(d) Listed:	Yes - Downstream, Reedy Creek is in	mpaired for E. coli, dis	solved oxygen and mercury.
TM	DL Approved:	No	Date TMDL Approve	d: Not Applicable
	e to the small (<1 sq. mile) drainage area te discharge only occurs during wet weat	at the Outfall, it is staff's best professional judg ther events.	ement that the critical flows	of the receiving stream would be zero.
6. Stati	utory or Regulatory Basis for Sp	ecial Conditions and Effluent Limitation	ons:	
	✓ State Water Control Law	,	EPA Guide	lines
	✓ Clean Water Act		✓ Water Qual	ity Standards
	✓ VPDES Permit Regulation	on	Other: 9VA	AC25-120 et seq.

EPA NPDES Regulation

General VPDES Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests

/.	7. Licensed Operator Requirements:			ments:	Not Applicable					
8.	8. Reliability Class:				Not Applicable	Not Applicable				
9.	Perm	nit C	haracterization:							
	,	<b>✓</b>	Private	<b>✓</b>	Effluent Limited		Possible Interstate Effect			
			Federal	<b>✓</b>	Water Quality Limited		Compliance Schedule Required			
			State		Toxics Monitoring Program Required		Interim Limits in Permit			
	-		POTW		Pretreatment Program Required		Interim Limits in Other Document			
			TMDL							

## 10. Wastewater Sources and Treatment Description:

Mr. Fuel is a commercial truck stop located at the Route 207 and Interstate 95 interchange in Caroline County. Runoff from the diesel fueling island drains into a trench drain along the front edge of the island. The conveyance system connects to a 6,000 gallon capacity oil/water separator (OWS) prior to discharging into a stormwater retention basin owned by Arogas, Inc.

The gasoline fueling islands are located on the other side of the retail building and are not connected to the OWS.

Point of compliance for this permit will be located at the access port adjacent to the detention basin prior to comingling with the parking lot runoff.

See Attachment 1 for the NPDES Permit Rating Worksheet.

See Attachment 2 for a facility schematic/diagram.

TABLE 1 OUTFALL DESCRIPTION							
Number	Discharge Sources	Treatment	Design Average Flow	Latitude / Longitude			
001	Stormwater/water runoff from a 10 bay diesel fueling island via trench drain	ows	0.000524 MGD*	37° 56′ 24.9″ / 77° 27′ 59.7″			
*Based on the assumption of an average monthly rainfall amount of 3.5 inches.							
See Attachment 3 for the Ruther Glen topographic map.							

- 11. Sludge Treatment and Disposal Methods: There is no domestic sludge generated from this operation.
- 12. Discharges and Monitoring Stations located within waterbody VAN-F21R:

TABLE 2 DISCHARGES & MONITORING STATIONS								
Permit Number	Facility Name	Туре	Receiving Stream					
VA0023329	Caroline Correctional Unit 2	Municipal	Herring Creek, UT					
VAG110206	Beasley Concrete Inc Milford Plant	Concrete General Permit	Mattaponi River, UT					
VAR051132	Williamsburg Millwork Corp.	Stormwater Industrial General Permit	Mill Creek					
VAG840146	Luck Stone – Caroline Plant	Non-Metallic Mineral Mining General Permit	Mattaponi River, UT					
3-RDY003.43	DEQ Monitoring Station		Reedy Creek					

## 13. Material Storage:

TABLE 3 MATERIAL STORAGE						
Materials Description	Volume Store	Spill/Stormwater Prevention Measures				
Diesel Fueling Island	Three (3) – 20,000 gallon USTs					
	Two (2) – 12,000 gallon USTs	unleaded fuels	Spill Prevention, Control and Countermeasure			
Gasoline Fueling Island	One (1) – 6,000 gallon UST	unreaded fuels	Plan (SPCC)			
	One (1) – 6,000 gallon UST	auto diesel				
Pre-packaged petroleum products	Various quantities		Under roof			

## 14. Site Inspection: Performed by Douglas Frasier on 8 February 2012 (see Attachment 4).

## 15. Receiving Stream Water Quality and Water Quality Standards:

## a. Ambient Water Quality Data

The nearest DEQ monitoring station is 3-RDY003.43, located approximately 10.1 miles downstream from Outfall 001 on Reedy Creek at the Route 648 bridge crossing. Impairments have been noted for Recreation Use, Aquatic Life Use and Fish Consumption Use due to *E. coli*, dissolved oxygen and mercury, respectively.

The Bacteria and Mercury Total Maximum Daily Loads (TMDLs) are expected by 2022. The dissolved oxygen impairment does not require the completion of a TMDL since the impairment is caused by natural conditions (i.e. swamp-like conditions).

The full planning statement is found in Attachment 5.

## b. Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260-(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, Reedy Creek, UT, is located within Section 3 of the York River Basin and designated as Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed  $32^{\circ}$  C and maintain a pH of 6.0 - 9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream. Since there was no effluent or receiving stream data, staff utilized default values for pH and temperature in order to calculate the criteria.

## Ammonia:

It is staff's best professional judgement that this is not a pollutant of concern since there are no sources on site in appreciable quantities.

## Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream and/or the effluent hardness values (expressed as mg/L calcium carbonate). Since there is no ambient hardness data available or effluent data since this is the first issuance, staff guidance suggests using a default hardness value of 50 mg/L CaCO<sub>3</sub> for streams east of the Blue Ridge.

The hardness-dependent metals criteria in Attachment 6 are based on this default value.

## Bacteria Criteria:

The Virginia Water Quality Standards 9VAC25-260-170.A state that the following criteria shall apply to protect primary recreational uses in surface waters:

E. coli bacteria per 100 mL of water shall not exceed a monthly geometric mean of the following:

	Geometric Mean <sup>1</sup>
Freshwater E. coli (N/100 mL)	126

<sup>&</sup>lt;sup>1</sup>For a minimum of four weekly samples taken during any calendar month

It is staff's best professional judgement that *E. coli* bacteria is not expected to be present in this industrial stormwater discharge; therefore, limitations are not applicable to this facility.

## c. Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Reedy Creek, UT, is located within Section 3 of the York River Basin. This section has not been designated with a special standard.

## d. Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on 30 January 2012 for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Rafinesque's Eastern Big-Eared Bat; Upland Sandpiper (song bird); Loggerhead Shrike (song bird); Bachman's Sparrow; Bald Eagle; and Migrant Loggerhead Shrike (song bird). The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and protect the threatened and endangered species found near the discharge.

## 16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream critical 7Q10 and 1Q10 flows have been determined to be 0.0 MGD and the surrounding area is highly developed; therefore, it is staff's best professional judgement that the receiving stream, Reedy Creek, UT, be classified as Tier 1. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

## 17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points are equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLAs) are calculated. Even though the critical 7Q10 and 1Q10 flows have been determined to be zero, the majority of discharges would be a result of precipitation and it is probable that flow would be present in the receiving stream. However, that flow would be variable depending on the amount of precipitation the area received. Therefore, it is staff's best professional judgement that the WLAs be set equal to the WQS to ensure that the receiving stream is protected at all times.

The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency and statistical characteristics of the effluent data.

## a. Effluent Screening

Sampling data submitted with the permit application, as required, has been reviewed and determined to be suitable for evaluation.

## b. Mixing Zones and Wasteload Allocations (WLAs)

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

WLA =  $\frac{C_o [Q_e + (f)(Q_s)] - [(C_s)(f)(Q_s)]}{Q_e}$ 

Where:

WLA = Wasteload allocation

C<sub>o</sub> = In-stream water quality criteria

 $Q_e$  = Design flow

 $Q_s$  = Critical receiving stream flow

(1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; harmonic mean for carcinogen-human health criteria; 30Q10 for ammonia criteria; and 30Q5 for non-carcinogen

human health criteria)

f = Decimal fraction of critical flow

C<sub>s</sub> = Mean background concentration of parameter in the receiving stream.

Since the amount of flow present in the receiving stream would vary during a discharge event and the potential exists that a discharge could be a result from daily operations, it is staff's best professional judgement that determination of a mixing zone is not possible. Therefore, the WLA will be equal to the  $C_0$  to ensure that the water quality criteria are maintained at all times.

## c. Effluent Limitations, Outfall 001 - Toxic Pollutants

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an instream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

## 1). Ammonia as N:

This is an industrial stormwater discharge and ammonia based products are not utilized or stored at this facility. It is staff's best professional judgement that ammonia is not present in appreciable amounts; thus, not a pollutant of concern.

## 2). Total Residual Chlorine:

This is an industrial stormwater discharge and chlorine based products are not utilized or stored at this facility. Daily operations do utilize potable water during wash downs but it is unlikely that a discharge would occur during this time; allowing any residual chlorine present to dissipate prior to a discharge. Therefore, it is staff's best professional judgement that chlorine is not present in appreciable amounts; thus, not a pollutant of concern.

## 3). Metals:

It is staff's best professional judgement that any metal concentrations present would be negligible. The source areas consist of fueling islands and the source water is either precipitation or wash downs from daily operations. Therefore, metals would not be present in appreciable amounts: thus, not a pollutant of concern.

## 4). Total Petroleum Hydrocarbons:

It is proposed that a technology-based limit of 15 mg/L for the parameter Total Petroleum Hydrocarbons (TPH) be included with this issuance. This limit is applicable for discharges where the contamination is from petroleum products other than gasoline. It is based on the ability of simple oil/water separator technology to recover free product from water. Wastewater that is discharged without a visible sheen is generally expected to meet this effluent limitation.

## 5). Naphthalene:

The proposed effluent limitation for naphthalene is based on the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation & Hydrostatic Tests* (9VAC25-120 et seq.). This is a water quality-based limit. It is generally applied at sites where contamination is from diesel or other fuels that are not classified as gasoline. Naphthalene is a component of both gasoline and non-gasoline petroleum products, but its relative concentration is higher in products such as diesel and kerosene than in gasoline. The source area is a diesel fueling island.

## d. Effluent Limitations and Monitoring, Outfall 001 - Conventional and Non-Conventional Pollutants

pH limitations are set at the water quality criteria.

## e. Effluent Limitations and Monitoring Summary

The effluent limitations are presented in the following table. Limits were established for pH, Total Petroleum Hydrocarbon (TPH) and Naphthalene.

The limitations for Naphthalene and TPH are based on staff's best professional judgement, source area and the limitations as set forth in General Permit 9VAC25-120 et seq.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

## 18. Antibacksliding:

This is the first permit issuance for this facility; therefore, backsliding is not applicable.

## 19. Effluent Limitations/Monitoring Requirements:

Maximum average monthly flow is 0.000524 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS		
	LIMITS	Monthly Average	Daily Maximum	Minimum	<u>Maximum</u>	-	
Flow (MGD)	NA	NL	NA	NA	NL	1/M	Estimate
pH	3	NA	NA	6.0 S.U.	9.0 S.U.	1/M	Grab
Total Petroleum Hydrocarbons (TPH)*	2,4	NA	NA	NA	15 mg/L	1/M	Grab
Naphthalene	2,4	NA	NA	NA	10 μg/L	1/M	Grab

The basis for the limitations codes are:

1. Federal Effluent Requirements

MGD = Million gallons per day.

I/M = Once every month.

2. Best Professional Judgement

NA = Not applicable.

3. Water Quality Standards

NL = No limit; monitor and report.

4. 9VAC25-120 (Petroleum General Permit)

S.U. = Standard units.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

<sup>\*</sup>Total Petroleum Hydrocarbons (TPH) shall be analyzed using EPA SW 846 Method 8015 for diesel range organics or by EPA SW 846 Method 8270 Extended.

## 20. Other Permit Requirements:

a. Permit Section Part I.B. contains quantification levels and compliance reporting instructions.

9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

b. Permit Section Part I.C. details the requirements of a Stormwater Pollution Prevention Plan.

Stormwater associated with industrial activity may contain pollutants in quantities that could adversely affect water quality. Stormwater discharges which are discharged through a conveyance or outfall are considered point sources and require coverage by a VPDES discharge permit. The primary method to reduce or eliminate pollutants in stormwater discharges originating from an industrial facility is through the use of best management practices (BMPs). The Stormwater Management Plan requirements are derived from the VPDES General Permit for Stormwater Discharges Associated with Industrial Activity, 9VAC25-151 et seq.

## 21. Other Special Conditions:

- a. O&M Manual Requirement. Required by VPDES Permit Regulation, 9VAC25-31-190.E. On or before 8 August 2012, the permittee shall submit for approval an Operations and Maintenance (O&M) Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO). Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- b. Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:
  - 1). That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - a) One hundred micrograms per liter;
    - b) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
    - c) Five times the maximum concentration value reported for that pollutant in the permit application; or
    - d) The level established by the Board.
  - 2). That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - a) Five hundred micrograms per liter;
    - b) One milligram per liter for antimony;
    - c) Ten times the maximum concentration value reported for that pollutant in the permit application; or
    - d) The level established by the Board.
- c. <u>Materials Handling/Storage</u>. 9VAC25-31-50.A. prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.
- d. <u>No Discharge of Detergents, Surfactants or Solvents to the Oil/Water Separators</u>. This special condition is necessary to ensure that the oil/water separators' performance is not impacted by compounds designed to emulsify oil. Detergents, surfactants and some other solvents will prohibit oil recovery by physical means.
- e. <u>Oil/Water Separator Logs</u>. This special condition requires the permittee to report on a monthly basis, the inspection of the oil/water separator and all clean-outs performed on the treatment units. At a minimum, the permittee shall check the level of the separator on a monthly basis. The monthly inspection and any clean-outs shall be reported with the Discharge Monitoring Reports.

- f. <u>Stormwater Collection System Maintenance</u>. The permittee shall maintain the stormwater conveyance system to ensure that adequate capacity exists to direct the runoff through the oil/water separator. Conveyances and inlets shall be inspected monthly and accumulated grit and debris removed as required.
- g. <u>TMDL Reopener</u>. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL that may be developed and approved for the receiving stream.
- 22. <u>Permit Section Part II</u>. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

## 23. Changes to the Permit from the Previously Issued Permit:

a. Special Conditions: Not Applicable.

b. Monitoring and Effluent Limitations: Not Applicable.

24. Variances/Alternate Limits or Conditions: Not Applicable.

25. Public Notice Information:

First Public Notice Date:

6 April 2012

Second Public Notice Date:

13 April 2012

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193; Telephone No. (703) 583-3873; Douglas.Frasier@deq.virginia.gov. See Attachment 7 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action and may request a public hearing during the comment period. Comments shall include the name, address and telephone number of the writer and of all persons represented by the commenter/requester and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

## 26. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):

Reedy Creek has been listed as impaired due to excursions in *E.* coli, dissolved oxygen and mercury. A TMDL is expected by 2022 for both the bacteria and mercury impairments. It has been determined that no TMDL is required for the dissolved oxygen impairment since it is caused by natural conditions.

## 27. Additional Comments:

Previous Board Action(s):

Not Applicable.

Staff Comments:

None.

Public Comment:

No comments were received during the public notice.

EPA Checklist:

The checklist can be found in **Attachment 8**.

## Fact Sheet Attachments Table of Contents

Arogas, Inc. d.b.a. Mr. Fuel VA0092649 2012 Issuance

Attachment 1	NPDES Permit Rating Worksheet
Attachment 2	Facility Schematic/Diagram
Attachment 3	Topographic Map
Attachment 4	Site Inspection Memo
Attachment 5	Planning Statement
Attachment 6	Water Quality Criteria
Attachment 7	Public Notice
Attachment 8	EPA Checklist

									gular Addition		
VPI	DES NO. :	VA009	2649						cretionary Ac ore change, b	ldition out no status Cha	inge
								De	letion		
	lity Name:			.a. Mr. F	uel			-			
	/ County:		Glen / C								
	ing Water: erbody ID:	VAN-F	Creek, L	<u> </u>	***************************************						***************************************
vval	sibody iD.	V / (14-1	2111	<del>)</del>				***********************	***************************************		
	lity a steam el e following ch			c =4911) wi	th one or		<i>permit for a</i> mu			sewer serving a	
1. Power ou	itput 500 MW or	greater (no	t using a coo	ling pond/lak	(e)	I	S; score is 700	(stop her	e)		
2. A nuclear	r power Plant					X NO	; (continue)				
flow rater	vater discharge				eam's 7Q10						
Yes; s	score is 600 (s	top here)	X NO;	(continue)							
	R 1: Toxic	Pollutar									
PCS SIC (				y Sic Code	***************************************	£ b	Other Sic Cod	des:	<del></del> -		
industriai	Subcategory (	Jode:	)00	((	Jode 000 i	f no subca	tegory)				
Determine	the Toxicity p	otential fro	om Append	lix A. Be su	ire to use i	the TOTAL	toxicity poten	tial columi	n and check c	one)	
Toxicity	Group C	ode Po	ints	Toxicit	y Group	Code	Points	-	Toxicity Grou	p Code	Points
No pro waste :	cess streams	0 (	)	3.		3	15		7.	7	35
1.		1 !	5	4.		4	20		8.	8	40
2.		2 1	0	5.		5	25		9.	9	45
				6.		6	30		] 10.	10	50
								(	Code Number	Checked:	8
									Total Points	Factor 1:	40
FACTO	R 2: Flow/s	Stream I	Flow Vol	ume (Con	nplete eith	er Section	A or Section E	; check o	nly one)		
	<ul> <li>Wastewater</li> </ul>		/ considere	d						Flow Considere	
	/astewater Typeee Instruction		Co	de Po	ints		ewater Type nstructions)	Perce		Nastewater Concer Stream Low Flow	ntration at
Type I:	Flow < 5 MG	•	<u> </u>	1	0	(500)	noti dottorio)			Code	Points
	Flow 5 to 10	MGD	1	2 1	0	Т	ype I/III:		< 10 %	41	0
	Flow > 10 to	50 MGD	1	3 2	20			10 %	% to < 50 %	42	10
	Flow > 50 M	GD	1	4 3	80				> 50%	43	20
Type II:	Flow < 1 MG	<b>S</b> D	X 2	1 1	0	-	Гуре II:		< 10 %	51	0
	Flow 1 to 5 l	MGD	2	2 2	20			10 %	% to < 50 %	52	20
	Flow > 5 to	10 MGD	2	3 3	30			:	> 50 %	53	30
	Flow > 10 M	GD	2	4 5	50						
Type III:	Flow < 1 MG	SD.	3	1	0						
21	Flow 1 to 5 l		3		0						
	Flow > 5 to	10 MGD			20						
	Flow > 10 M	GD	3	4 3	30						
								Cade C	hecked from	Section A or B:	21
								Joue C		oints Factor 2:	10

## **FACTOR 3: Conventional Pollutants**

(only when limited by the permit)						
A. Oxygen Demanding Pollutants: (che	eck one) BOD	COD	Ot	her:		
Permit Limits: (check one)	<pre>&lt; 100 lbs/day 100 to 1000 lbs/da &gt; 1000 to 3000 lbs &gt; 3000 lbs/day</pre>	ıy	Code 1 2 3 4	Points  0 5 15 20 ode Number Che Points Sc		NA 0
B. Total Suspended Solids (TSS)						
Permit Limits: (check one)	< 100 lbs/day 100 to 1000 lbs/da > 1000 to 5000 lbs > 5000 lbs/day	ıy	Code 1 2 3 4	Points  0 5 15 20 ode Number Che Points Sc	***************************************	NA 0
C. Nitrogen Pollutants: (check one)	Ammonia	a Other:			***************************************	***************************************
Permit Limits: (check one)	Nitrogen Equivales  < 300 lbs/day 300 to 1000 lbs/da > 1000 to 3000 lbs > 3000 lbs/day	ау	Code 1 2 3 4	Points 0 5 15 20 ode Number Che	cked:	NA
				Points Sc Total Points Fac		0
FACTOR 4: Public Health Imples there a public drinking water supply the receiving water is a tributary)? A pultimately get water from the above ref	located within 50 miles down bublic drinking water supply ference supply.	vnstream of the efflu may include infiltrati	ent discharge (tl ion galleries, or d	nis include any bo other methods of	ody of water conveyance	to which that
Determine the <i>Human Health</i> potential the <i>Human Health</i> toxicity group colum Toxicity Group Code Points		same SIC doe and Code Points		erence as in Facti Foxicity Group	or 1. (Be su Code	re to use Points
No process 0 0	3.	3 0	,	7.	7	15
waste streams  1. 1 0	4.	4 0		8.	8	20
2. 2 0	5.	5 5		9.	9	25
	6.	6 10		10.	10	30
				ode Number Che	***************************************	NA 0

## **FACTOR 5: Water Quality Factors**

Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-A. base federal effluent guidelines, or technology-base state effluent guidelines) or has a wasteload allocation been assigned to the discharge?

	Code	Points
YES	1	10
X NO	2	0

B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

X YES	Code 1	Points 0
NO NO	2	5

C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

YES	Code 1				Points 10						
X NO	2				0						
Code Number Checked:	Α	2		В	1		С	2			
Points Factor 5:	Α	0	+	В	0	+	C	0	****	0	

## **FACTOR 6: Proximity to Near Coastal Waters**

A. Base Score: Enter flow code here (from factor 2) 21

Check a	ppropriate fa	acility HPRI code	(from PCS):	Enter the multiplica	ition factor the	at correspo	onds to the flow code:	0.10
	HPRI#	Code	HPRI Score	i	Flow Code		Multiplication Fac	tor
	1	1	20	1	1, 31, or 41		0.00	
				1	2, 32, or 42		0.05	
	2	2	0	1	3, 33, or 43		0.10	
					14 or 34		0.15	
	3	3	30		21 or 51		0.10	
					22 or 52		0.30	
X	4	4	0		23 or 53		0.60	
					24		1.00	
	5	5	20					
HP	RI code che	cked: 4						
Base Sc	ore (HPRI S	core): 0	X	(Multiplication Factor)	0.10	=	0	

B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

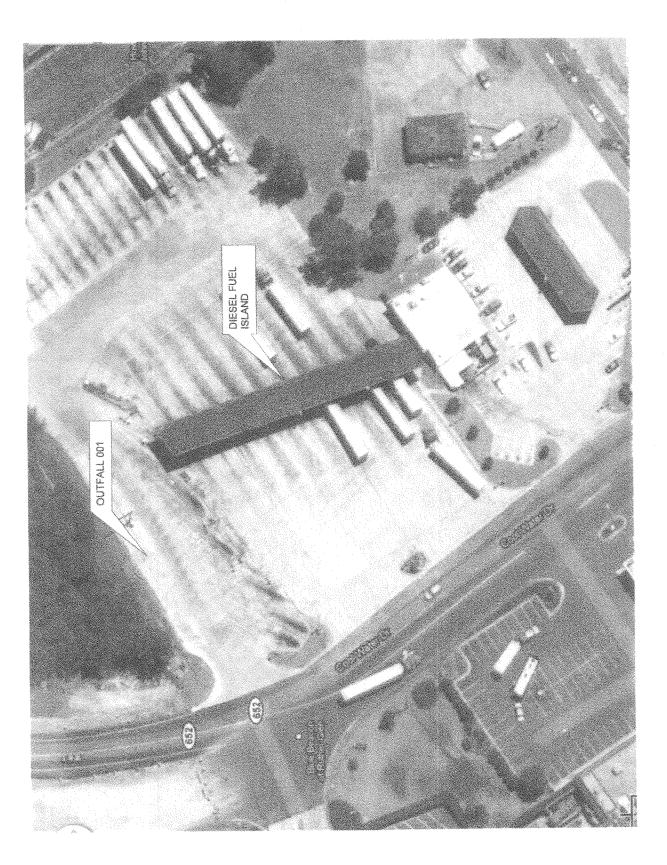
C. Additional Points – Great Lakes Area of Concern For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

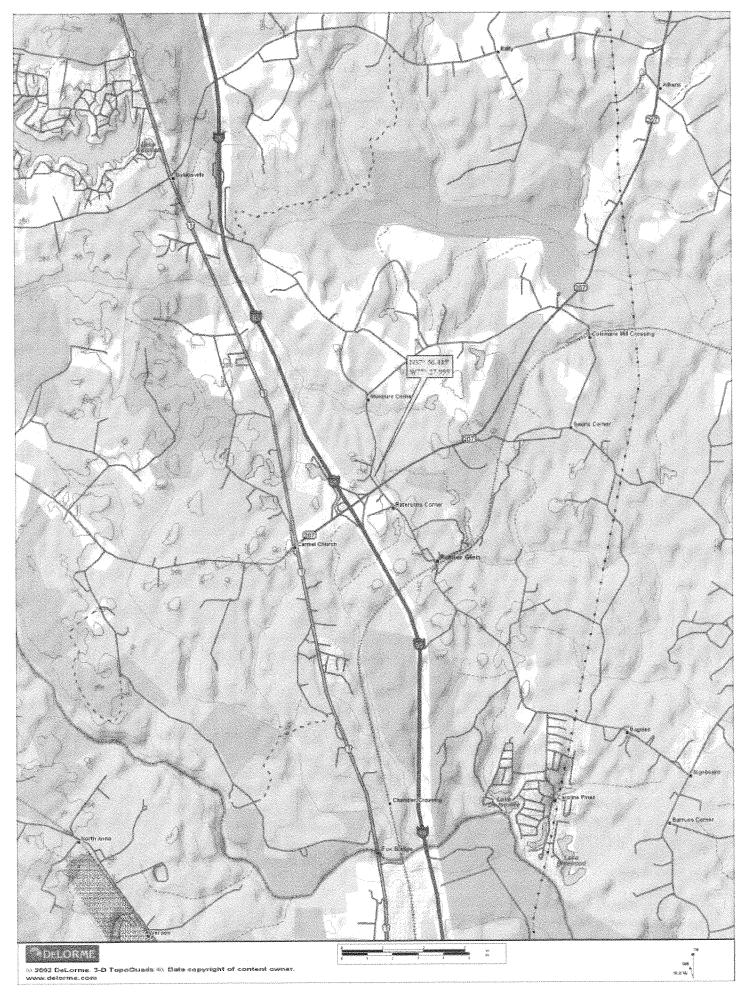
Code	Points						Code		Points		
1	10						1		10		
2	0						2		0		
C	ode Number Checked:	Α	4		В	NA		С	NA		
	Points Factor 6:	A	0	+	В	0	+	C	0	==	0

Attachment 1 Page 3 of 4

## **SCORE SUMMARY**

<u>Factor</u>		Description	Total	<u>Points</u>
1	T	oxic Pollutant Potential	40	)
2	Flo	ws / Streamflow Volume	10	
3	C	onventional Pollutants	0	
4	§	Public Health Impacts	0	
5	1	Water Quality Factors	0	
6	Proxin	nity to Near Coastal Waters	0	
	тот	AL (Factors 1 through 6)	5(	)
S1. Is the total score equal to or	grater than 80	YES; (Facility is a Major)	XN	0
S2. If the answer to the above qu	rankiama in ma resulta	you like this facility to be discretional		
·	,			
X NO				
paromatone				
YES; (Add 500 points to Reason:	the above score and	d provide reason below:		
Reason.				
***************************************				
NEW SCORE : 50				
NEW SCORE : 50 OLD SCORE : NA				
OLD SCORE . INA				
		Permit Review	er's Name :	Douglas Frasier
		Pho	ne Number:	703-583-3873
			Date:	14 November 2011





## **MEMORANDUM**

TO:

File

FROM:

Douglas Frasier

DATE:

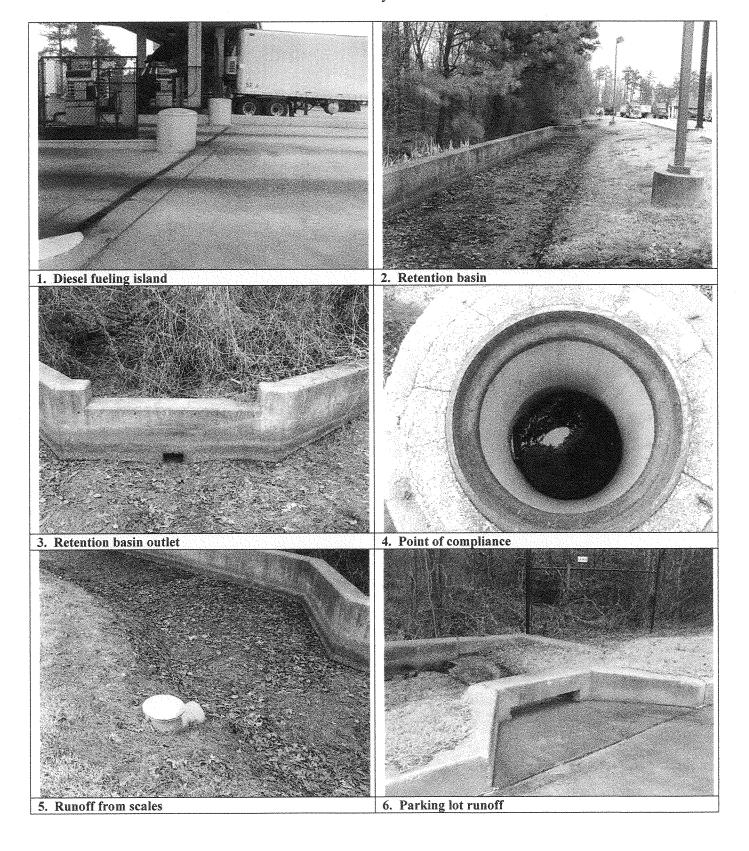
8 February 2012

SUBJECT:

Site Inspection – Mr. Fuel – VA0092649

This is the first issuance for this facility. Mr. Fuel is a commercial truck stop located at the Route 207 and Interstate 95 interchange in Caroline County. Runoff from the diesel fueling island drains into a trench drain along the front edge of the island. The conveyance system connects to a 6,000 gallon capacity oil/water separator prior to discharging into a stormwater retention basin owned by Arogas, Inc. The retention basin is a grassy area with a concrete wall along the back side. There is an opening in the middle of the wall at ground level to allow the collected runoff to slowly enter a swamp like area. This basin also receives runoff from the truck entrance, parking lot and scales.

## Arogas, Inc. d.b.a. Mr. Fuel VA0092649 Site Visit 8 February 2012



To: Douglas Frasier

From: Katie Conaway/Jennifer Carlson

Date: February 10, 2012

Subject: Planning Statement for Arogas, Inc. d.b.a. Mr. Fuel

Permit Number: VA0092649

Discharge Type: Industrial – oil/water separator at fueling island

Discharge Flow: 0.000643 MGD

Receiving Stream: Unnamed Tributary to Reedy Creek

Latitude / Longitude: 37° 56′ 24.9″ / -77° 27′ 59.7″

Streamcode: 8-XJQ Waterbody: VAN-F21R

River Basin Code: 8

Water Quality Standards: Class III, Section 3

Rivermile: 0.16

Drainage Area: 0.005 mi<sup>2</sup>

1. Is there monitoring data for the receiving stream?

There is not monitoring data for the unnamed tributary to Reedy Creek.

- If yes, please attach latest summary.
- If no, where is the nearest downstream monitoring station.

The nearest downstream DEQ monitoring station is 3-RDY003.43, located on Reedy Creek at the Route 648 bridge crossing, approximately 10.1 miles downstream of Outfall 001. The following is the summary for Reedy Creek, as taken from the 2010 Integrated Report:

Class VI, Section 3.

DEQ ambient and fish tissue/sediment monitoring station 8-RDY003.43, at Route 648.

Ambient monitoring finds a dissolved oxygen impairment, resulting in an impaired classification for the aquatic life use. The dissolved oxygen excursions may be attributable to natural conditions as this segment is a low-lying Coastal Plain environment with no riffles and slow moving pools that are subject to low dissolved oxygen. E. coli monitoring finds a bacteria impairment, resulting in an impaired classification for the recreation use.

The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, mercury fish consumption advisory. Also, fish tissue monitoring data revealed an exceedance of the water quality criterion value (TV) of 300 parts per billion (ppb) for mercury (Hg) in fish tissue was recorded in three species of fish samples collected in 2008, resulting in a classification of not supporting for the fish consumption use. The wildlife use is considered fully supporting.

- 2. Is the receiving stream on the current 303(d) list? No.
  - If yes, what is the impairment? N/A
  - Has the TMDL been prepared? N/A
  - If yes, what is the WLA for the discharge? N/A
  - If no, what is the schedule for the TMDL? N/A
- 3. If the answer to (2) above is no, is there a downstream 303(d) listed impairment?

Yes, Reedy Creek is listed with several impairments.

- If yes, what is the impairment?

Recreation Use (*E. coli*) – Impairment begins approximately 0.16 miles downstream of Outfall 001; Sufficient excursions from the maximum E. coli bacteria criterion (2 of 12 samples - 16.7%) were recorded at DEQ's ambient water quality monitoring station (8-RDY003.43) at the Route 648 bridge crossing to assess this stream segment as not supporting the recreation use goal for the 2010 water quality assessment.

Aquatic Life Use (dissolved oxygen) - Impairment begins approximately 0.16 miles downstream of Outfall 001; Sufficient excursions below the minimum dissolved oxygen criterion (2 of 12 samples - 16.7%) were recorded at DEQ's ambient water quality monitoring station (8-RDY003.43) at the Route 648 crossing to assess this stream segment as not supporting the aquatic life use goal for the 2010 water quality assessment. This segment is classified as a Class VII swamp water, and the excursions may be attributable to natural conditions as this segment is a low-lying Coastal Plain environment with no riffles and slow moving pools that are subject to low dissolved oxygen levels.

Fish Consumption Use (mercury in fish tissue) - Impairment begins approximately 0.16 miles downstream of Outfall 001; Excursions above the water quality criterion based fish tissue value (TV) of 300 parts per billion (ppb) for mercury in fish tissue were recorded in 3 species of fish (3 total samples); creek chubsucker (2003), bluegill sunfish (2008), and yellow bullhead catfish (2008), collected at monitoring station 8-RDY003.43. Additionally, the fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, mercury fish consumption advisory. The advisory, dated 10/07/09, limits redbreast sunfish and yellow bullhead catfish consumption to no more than two meals per month. The affected area extends from the Route 301 bridge crossing downstream to the confluence with the Mattaponi River. The area of Reedy Creek under the fish consumption advisory is located approximately 9.3 miles downstream of Outfall 001.

- Has a TMDL been prepared?

A TMDL has not yet been developed to address any of the above listed impairments.

- Will the TMDL include the receiving stream?

The TMDLs will not specifically include the receiving stream, but all upstream facilities will be taken into account during TMDL development.

- Is there a WLA for the discharge?

The TMDLs have not been developed, thus no WLAs have been established.

- What is the schedule for the TMDL?

Bacteria (*E. coli*) TMDL – due 2022 Mercury TMDL – due 2022

The dissolved oxygen impairment will not require the completion of a TMDL. Reedy Creek is classified as a Class VII swamp water and currently, there is not established criterion for dissolved oxygen for Class VII waters. The dissolved oxygen parameter remains listed as impaired, but not needing a TMDL.

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

There is a completed downstream TMDL for the aquatic life use impairment for the Chesapeake Bay. However, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

- 5. What is the drainage area at this outfall? 0.005 mi<sup>2</sup>
- 6. Fact Sheet Requirements Please provide information on other VPDES permits or VADEQ monitoring stations located within a 2 mile radius of the facility. In addition, please provide information on any drinking water intakes located within a 5 mile radius of the facility.

Within the same watershed as this facility, there are no public water supply intakes within 5 miles, nor are there any other VPDES permits or DEQ monitoring stations located within 2 miles.

# 2/10/2012 - 4:37 PM

# FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Arogas, Inc. d.b.a. Mr. Fuel Facility Name:

Reedy Creek, UT

Receiving Stream:

Permit No.: VA0092649

Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information
Mean Hardness (as CaCO3) ==	mg/L	1Q10 (Annual) =	0 MGD	Annual - 1Q10 Mix =
90% Temperature (Annual) =	deg C	7Q10 (Annual) =	0 MGD	- 7Q10 Mix =
90% Temperature (Wet season) =	O gab	30Q10 (Annual) ==	0 MGD	- 30Q10 Mix =
90% Maximum pH =	SU	1Q10 (Wet season) =	= 0 MGD	Wet Season - 1Q10 Mix =
10% Maximum pH ==	ns	30Q10 (Wet season)	0 MGD	- 30Q10 Mix =
Tier Designation (1 or 2) =		3005 ≈	0 MGD	
Public Water Supply (PWS) Y/N? =	C	Harmonic Mean ≖	0 MGD	
Trout Present Y/N? =	u			
Early Life Stages Present Y/N? =	, A			

Mixing Information		Emuent Information	
Annual - 1Q10 Mix =	% 0	Mean Hardness (as CaCO3) =	50 mg/L
- 7Q10 Mix =	% 0	90% Temp (Annual) =	25 deg C
- 30Q10 Mix =	% 0	90% Temp (Wet season) ==	15 deg (
Wet Season - 1Q10 Mix =	% 0	90% Maximum pH =	ns 8
- 30Q10 Mix =	% 0	10% Maximum pH =	US 7
		Discharge Flow ≈	0.000524 MGD

Parameter	Background	*****	Water Quality Criteria	ity Criteria	CACA-SOLIA	>	Wasteload Allocations	Allocations		¥	Antidegradation Baseline	n Baseline		An	tidegradatio.	Antidegradation Allocations			Most Limiting Allocations	Allocations	
(ug/l unless noted)	Conc.	Acute	Chronic	Chronic HH (PWS)	Ŧ	Acute (	Chronic H	HH (PWS)	Ŧ	Acute	Chronic H	HH (PWS)	<u></u>	Acute	Chronic	HH (PWS)	Ŧ	Acute	Chronic	HH (PWS)	王
Acenapthene	က	1	ŝ	na	9.9E+02		ı	na	9.9E+02	ı	ţ	}		1	ı	ı	1	ŧ	ı	na	9.9E+02
Acrolein	0	1		na	9.3E+00	1	ı	na	9.3E+00	l	1	į	;	ł	1	3	ı	ı	:	na	9.3E+00
Acrylonitrile <sup>c</sup>	0	1	I	na	2.5E+00	ł	1	na	2.5E+00	t		ı	1	ı	1	1	ì	:	:	na	2.5E+00
Aldrin <sup>c</sup>	0	3.0E+00	ŧ	na	5.0E-04	3.0E+00	ŧ	na	5.0E-04	1	ı	1		ŧ	ı	ŧ	ŀ	3.0E+00	;	na	5.0E-04
Ammonia-N (mg/l) (Yearly)	c	8 41F+00	1 24F+00	ä	ŀ	8 41E+00 1 24E+00	24F+00	æ		ļ	I	ı	1	1	ı	I	1	8.41E+00	1.24E+00	œ	İ
Ammonia-N (mg/l)	, с	445	2 385			8 41 = +00 2 3 6 = +00	007398			ŀ	į	į	1	240	ı	ŀ	1	8 415+00	2.36F+00	e	f
Anthracene	) C	1	-	2 0	4 OF+04			2 6	4 OF+04	1	ı	ı	ŀ	1	1	ı	ł	1	1	8	4.0E+04
Antimony	, 0	1	ı	e	6.4E+02	;	1	e C	6.4E+02	1	1	;	1	ı	ı	ı	1	ŧ	ŧ	na	6.4E+02
Arsenic	o	3.4E+02	1.5E+02	na	1	3.4E+02 1	1.5E+02	ec	1	ţ	;	ı	i	ı	ı	1	1	3.4E+02	1.5E+02	na	į
Barium	O	I	ŀ	na	ı	ı	ı	na	ı	)	ı	ŀ	1	1	ı	ı	l	ı	1	na	ı
Benzene <sup>c</sup>	o	ı	ı	Па	5.1E+02	ł	;	na	5.1E+02	ı	ł	ı	}	ı	1	1	1	;	:	na	5.1E+02
Benzidine <sup>c</sup>	0	l	ı	na	2.0E-03	ı	1	na	2.0E-03	ı	1	ı	1	1	ŧ	1	1	ī	;	e .	2.0E-03
Benzo (a) anthracene <sup>c</sup>	0	1	1	na	1.8E-01	ŧ	1	na	1.8E-01	ı	1	1	1	ı	1	ı	ı	ı	1	กล	1.8E-01
Benzo (b) fluoranthene <sup>c</sup>	0	1	ı	na	1.8E-01	ł	ı	na	1.8E-01	ı	ł	1	ı	1	ł	ŧ	ı	ı	ı	na	1.8E-01
Benzo (k) fluoranthene <sup>c</sup>	0	į	ı	na	1.8E-01	Į		na	1.8E-01	ı	ı	ł	1	į	;	ł	ı	1	:	na	1.8E-01
Benzo (a) pyrene <sup>c</sup>	6	ı	t	na	1.8E-01	ł	ı	na	1.8E-01	!	ı	ŧ	ı	ţ	ı	ţ	ţ	1	ŧ	na	1.8E-01
Bis2-Chloroethyl Ether <sup>c</sup>	0	1	ŧ	na	5.3E+00	ţ	I	Na	5.3E+00	1	ì	1		ł	1	i	1	;	ı	eu	5.3E+00
Bis2-Chloroisopropyl Ether	0	1	1	na	6.5E+04	ı	1	na	6.5E+04	ı	1	ţ	1	I	t	ŧ	ļ	ì	•	na	6.5E+04
Bis 2-Ethylhexyl Phthalate <sup>c</sup>	o	l	ı	BIT	2.2E+01	ı	1	na	2.2E+01	1	ţ	1	1	ł	ŧ	ŧ	ı	:	ŧ	na e	2.2E+01
Bromoform <sup>c</sup>	٥	1	i	na	1.4E+03	ı	1	na	1.4E+03	1	ı	t	!	1	****	ŧ	ı	ŧ	ŧ	na	1.4E+03
Butylbenzylphthalate	0	ı	1	na	1.9E+03	1	1	na	1.9E+03	1	ł	ł	ı	ı	1	1	l	ł	•	na	1.9E+03
Cadmium	0	1.8E+00	6.6E-01	na	1	1.8E+00 (	6.6E-01	na	1	1	1	1	ı	1	ı	1	1	1.8E+00	6,6E-01	na	ı
Carbon Tetrachloride <sup>c</sup>	0	ı	1	na	1.6E+01	ı	ı	na	1.6E+01	ı	1	ı	1	t	ı	ı	i	;	;	na	1.6E+01
Chlordane c	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.3E-03	na	8.1E-03	1	ı	1	1	ı	ı	1	ı	2.4E+00	4.3E-03	na	8.1E-03
Chloride	0	8.6E+05	2.3E+05	na	ı	8.6E+05 2	2.3E+05	na	1	1	1	1	1	1	I	1	î	8.6E+05	2.3E+05	na	ı
TRC	0	1.9E+01	1.1E+01	n 8	1	1.9E+01 1	1.1E+01	na	ı	ŧ	t	ŧ		1	t	ì	ı	1.9E+01	1.1E+01	na	ı
Chlorobenzene	О	1	AA*	na	1.6E+03	ž e	•	na	1.6E+03	1	Į			ŀ	Ę	***	1	1	1	na	1.6E+03
page 1 of 4									WLA.xisx - Freshwater WLAs	reshwater	WLAs								2/10/2012 - 4:37 PM	4:37 PM	

WLA.xlsx - Freshwater WLAs

Parameter	Background		Water Qua	Water Quality Criteria			Wasteload Allocations	Vilocations		A	Antidegradation Baseline	n Baseline		Anti	Antidegradation Allocations	Allocations			Most Limiting Allocations	Allocations	
(ug/l unless noted)	Conc.	Acute	Chronic	Chronic HH (PWS)	Ŧ	Acute	Chronic HH (PWS)	(PWS)	Ŧ	Acute	Chronic HH (PWS)	H (PWS)	壬	Acute	Chronic HH (PWS)	H (PWS)	Ŧ	Acute	Chronic H	HH (PWS)	Ŧ
Chlorodibromomethane <sup>c</sup>	0	1	ı	na	1.3E+02	1	ı	na	1.3E+02	I	ı	i.	1	, i	ī	1	í	ŧ	ŧ	g	1.3E+02
Chloroform	0	ı	ı	a	1.1E+04	1	**	na	1.1E+04	ı	ı	ţ	1	1	ı	ı	ı	;	ı	na	1.1E+04
2-Chloronaphthalene	0	1	1	na	1.6E+03	1	1	na	1.6E+03	;	į	1	;	1	1	ı	ı	:	ı	na	1.6E+03
2-Chlorophenol	0	1	ţ	a	1.5E+02	-	ı	na	1.5E+02	1	ŧ	\$	1	}	1	1	1	ı	:	na	1.5E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	В	ì	8.3E-02	4.1E-02	Па	ı	1	ſ	ł	}	ı	;	•	ì	8.3E-02	4.1E-02	na	t
Chromium III	0	3.2E+02	4.2E+01	na	ŀ	3.2E+02	4.2E+01	na	1	ě	ŧ	t		ļ	ı	ı	ı	3.2E+02	4.2E+01	na	
Chromium VI	0	1.6E+01	1.1E+01	na	I	1.6E+01	1.1E+01	na	l	ı	1	ţ	ı	î	1	ŧ	1	1.6E+01	1.1E+01	na	1
Chromium, Total	0	ļ	1	1.0E+02	į	1	ı	na	ı	ł	ě	ı		ı	ı	ı	ı	ı	ŀ	na	ì
Chrysene <sup>c</sup>	0	1	ı	na	1.8E-02		ı	กล	1.8E-02	ţ	1	1	1	ŧ		ŧ	ı	;	1	E CI	1.8E-02
Copper	0	7.0E+00	5.0E+00	a		7.0E+00	5.0E+00	na	1	ţ	I	ı		1	i	ļ	ł	7.0E+00	5.0E+00	na	i
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	an	1.6E+04	1	ı	ŧ	1	;	Į	;	ı	2.2E+01	5.2E+00	na	1.6E+04
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DDE c	0	1	ı	na	2.2E-03	1	1	na	2.2E-03	ŀ	1	1	1	t	į	1	1	ţ	ŧ	ņa	2.2E-03
por c	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	1	**	ì	1	ı	•	ŧ	ŀ	1.1E+00	1.0E-03	na	2.2E-03
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Diazinon	0	1.7E-01	1.7E-01	กล	ł	1.7E-01	1.7E-01	na	ì	ì	ŧ	I	I	1	ţ	ł	ł	1.7E-01	1.7E-01	na	;
Dibenz(a,h)anthracene <sup>c</sup>	0	ł	;	na	1.8E-01	1	1	na	1.8E-01	ł	1	ı	1	1	ţ	ı		ı	ı	na	1.8E-01
1,2-Dichlorobenzene	0	1	ı	пa	1.3E+03	ı	ı	na	1.3E+03	1	*	ŧ	1	1	ı	ı	1	1	ı	กล	1.3E+03
1,3-Dichlorobenzene	0	;	ı	na	9.6E+02	ı	ŀ	na	9.6E+02	ı	I	ı	1	1	;	,	ı	;	ŀ	na	9.6E+02
1,4-Dichlorobenzene	0	i	ı	na	1.9E+02	1	1	na	1.9E+02	ı	1	1	ı	t	ì	;	1	1	:	ë	1.9E+02
3,3-Dichlorobenzidine <sup>c</sup>	0	ı	ı	na	2.8E-01	1	į	a	2.8E-01	ı	ı	1		ı	ł	1	ı	1	:	eu eu	2.8E-01
Dichlorobromomethane <sup>c</sup>	o	ı		na	1.7E+02	ı	ı	na	1.7E+02	1	1	ı	1	ı	t	1	ı	t	:	na	1.7E+02
1,2-Dichloroethane <sup>c</sup>	0	ı	ı	na	3.7E+02	1	1	B	3.7E+02	ŧ	í	ţ	1	}	ł	ł	ı	\$	:	84	3.7E+02
1,1-Dichloroethylene	0	1	ı	na	7.1E+03	ı	ı	na	7.1E+03	1	1	ı	I	1	ŧ	<b>‡</b>	l	ı	;	a	7.1E+03
1,2-trans-dichloroethylene	o		ı	na	1.0E+04	ì	ļ	na	1.0E+04	a a	ſ	1	 I	ı	ı	<b>;</b>	1	ŧ	1	na	1.0E+04
2,4-Dichlorophenol	0	ı	ı	na	2.9E+02	1	ı	na	2.9E+02	l	ı	1	j	ı	ł	ŀ	1	ŀ	ı	na	2.9E+02
(2,4-Urchlorophenoxy acetic acid (2,4-D)	0	1	1	na	1	1	í	na	ì	ł	I	ı	ŀ	ı	1,	;	1	ì	I	na	ī
1,2-Dichloropropane <sup>c</sup>	0	2	ı	na e	1.5E+02	I	1	па	1.5E+02	ı	ſ	!	1	į	Ī	}	1	:	ı	na	1.5E+02
1,3-Dichloropropene <sup>c</sup>	0	1	;	g	2.1E+02	į	ľ	na	2.1E+02	1	:		I	ı	ı	ı	1	ı	1	na	2.1E+02
Dieldrin <sup>c</sup>	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	1	. 1	1	1	1	ŧ	ı	ŀ	2.4E-01	5.6E-02	na	5.4E-04
Diethyl Phthalate	0	I	;	na	4.4E+04	1	1	มล	4.4E+04	ì	ı	1	1	1	ı	i	ı	I	ī	กล	4.4E+04
2,4-Dimethylphenol	0	1	i	na	8.5E+02	1	ı	na	8.5E+02	ı	1	1	1	. \$	ţ	ŧ		ı	ı	กล	8.5E+02
Dimethyl Phthalate	0	1	ı	па	1.1E+06	1	ı	na	1.1E+06	ŧ	ì	ı	1	ı	I	;	ı	ţ	t	na	1.1E+06
Di-n-Butyl Phthalate	0	i	ŧ	na	4.5E+03	1	ł	na	4.5E+03	1	*	1	;	1	ŧ	1	1	ŧ	ţ	na	4.5E+03
2,4 Dinitrophenol	0	i	!	na	5.3E+03	ı	i	na	5.3E+03	1	ı	1	I	1	1	ı	1	8	:	na	5.3E+03
2-Methyl-4,6-Dinitrophenol	0	ı	1	na	2.8E+02	1	ı	na	2.8E+02	1	I	ı	1	ı	į	1	1	1	1	na	2.8E+02
2,4-Dinitrotoluene <sup>c</sup>	O	i	ł	na	3.4E+01		1	na	3.4E+01	ı	ı	ı	;	1	l		1	i	1	na	3.4E+01
tetrachlorodibenzo-p-dioxín	0	1	ı	na	5.1E-08	1	ı	na	5.1E-08	1	ı	1	1	ł	i	1	ı	:	ĭ	na	5.1E-08
1,2-Diphenylhydrazine <sup>C</sup>	0	1	f	na	2.0E+00	1	1	na	2.0E+00	1	1	1	ı	1	1	1	1	ı	1	na	2.0E+00
Aipha-Endosulfan	٥	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	1	1	ı	ı	1	1	ı	1	2.2E-01	5.6E-02	na	8,9E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	1	ı	ı	I	ı	ł	ł	i	2.2E-01	5.6E-02	na	8.9E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	;	1	2.2E-01	5.6E-02	l	ì	ı	ł	;		ţ	ı	í	ŧ	2.2E-01	5.6E-02	t	;
Endosulfan Sulfate	0	i	I	na e	8.9E+01	ŀ	f	na	8.9E+01	1	1	ı	1	1	ţ	1	1	ı	ı	na	8.9E+01
Endrin	0	8.6E-02	3.6E-02	па	6.0E-02	8.6E-02	3.6E-02	กล	6.0E-02	ţ	ŧ	1		1	t	ī	1	8.6E-02	3.6E-02	na	6.0E-02
Endrin Aldehyde	0	olivies consequente coloris consequence and a second coloris c	nadarakan kanan kana	na	3.0E-01		1	na	3.0E-01	**			+	***	***	1	1	:	2	na	3.0E-01

Parameter	Background		Water Quality Criteria	ity Criteria			Wasteload Allocations	llocations		Ar	Antidegradation Baseline	, Baseline		Antide	Antidegradation Allocations	ocations		M	Most Limiting Allocations	llocations	
(ng/l nnless noted)	Conc.	Acute	Chronic	Chronic HH (PWS)	Ή	Acute	Chronic HH (PWS)	H (PWS)	壬	Acute	Chronic HH (PWS)		王	Acute Ct	Chronic HH (PWS)	_	Ŧ	Acute	Chronic H	HH (PWS)	포
Ethylbenzene	0	1	ł	ē	2.1E+03	ı	ı	na	2.1E+03	ı	ł	ŧ	1	1	1	ì	ı	ī	i	8	2.1E+03
Fluoranthene	0	ı	ı	กล	1.4E+02	ì	;	na	1.4E+02	ı	ı	. 1	ı	ļ	;			1	ı	na	1.4E+02
Fluorene	0	ŧ	ł	na	5.3E+03	1	ŀ	na	5.3E+03	1	ı	1	1	ŀ	1	ì			1	na	5.3E+03
Foaming Agents	0	ŧ	į	na	ŀ	I	ŀ	na	1	1	ı	ı	1	1	ı	1	1	;	ī	ກສ	t
Guthion	o	1	1.0E-02	na	ı	ŧ	1.0E-02	na		ı	à	1		1	!	1	1	,	1.0E-02	a	ı
Heptachlor <sup>c</sup>	0	5.2E-01	3.8E-03	Па	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	ı	ı	1		ı	Į.	1	1		3.8E-03	na	7.9E-04
Heptachlor Epoxide <sup>c</sup>	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	t	ł	1		1	1	**	2	5.2E-01	3.8E-03	na	3.9E-04
Hexachlorobenzene <sup>c</sup>	0	1	ı	na	2.9E-03	ı	1	na	2.9E-03	1	ŧ	;	1	;	1		1	ı	:	กล	2.9E-03
Hexachlorobutadiene <sup>c</sup>	0	ı	ı	ng S	1.8E+02	ŀ	ţ	a	1.8E+02	*	ı	**		ı	ı	ì	ı	ţ	ı	8	1.8E+02
Hexachlorocyclohexane Alpha-BHC <sup>c</sup>	C	ŀ	ì	g	4 9E-02	ŀ	í	80	4 9F-02	I	ı	ı	1	ı	ı	ı		1	1	na	4.9E-02
Hexachlorocyclohexane	,			!	!			!	!												
Beta-BHC <sup>c</sup>	0	ı	1	na	1.7E-01	ł	1	a L	1.7E-01	I	i	l	1	;	ŀ	ı	ı	;	i	na	1.7E-01
Hexachiorocyclohexane Gamma-BHC <sup>c</sup> (Lindane)	0	9.5E-01	na L	na Bu	1.8E+00	9.5E-01	ı	na	1.8E+00	ŀ	ı	ı		ı	1	1	6	9.5E-01	í	an a	1.8E+00
Hexachlorocyclopentadiene	0	ı	í	na	1.1E+03	ı	1		1.1E+03	;	ı	1		I	i	1	1	ŀ	ŀ	na	1.1E+03
Hexachloroethane <sup>c</sup>	0	ı	I	na	3.3E+01	*****	ì	na	3.3E+01	4	ı	1	-	1	ı	ţ		:	:	na na	3.3E+01
Hydrogen Sulfide	0	ı	2.0E+00	na	ı	ı	2.0E+00	na	ı	1	í	1		ŧ	1	ŀ		1	2.0E+00	na	ŀ
Indeno (1,2,3-cd) pyrene <sup>c</sup>	0	ì	ļ	ВП	1.8E-01	ŀ	1	na	1.8E-01	ı	ı	1		ı	1	1	ı	1	ì	na	1.8E-01
iron	0	ŧ	ì	na	1	***	t	na	l	ı	1	1		1	1	1	 	ì	;	na	ŧ
Isophorone <sup>c</sup>	C	ì	1	na B	9.6E+03	ł	1	n a	9.6E+03		1	1	1	1	I	1		į	ŧ	æ	9.6E+03
Kepone	0	;	0.0E+00	na	l	ı	0.0E+00	na a	ı	1	ı	ţ	1	ı	ļ	1	1		0.0E+00	na	;
Lead	0	4.9E+01	5.6E+00	na	ı	4.9E+01	5.6E+00	na	l	ı	ı	***	ŀ	ł	Ę	;	4	4.9E+01	5.6E+00	na	ł
Malathion	0	;	1.0E-01	na	ı	ì	1.0E-01	ac	1	ŧ	1	;	ì	ŀ	i	1			1.0E-01	na	1
Manganese	0	1	ŧ	na	1	ı	t	na	1	t	ı	1	ı	1	ţ	1	1	ě	ı	na	
Mercury	0	1.4€+00	7.7E-01	;	i.	1.4E+00	7.7E-01	;	i	1	***	Į		ı	ı	1	-	1.4E+00	7.7E-01	•	:
Methyl Bromide	0	l	ı	na	1.5E+03	ŧ	ŧ	na	1.5E+03	ł	ļ	1	1	ı	1	1	ı	ŀ	ı	na	1.5E+03
Methylene Chloride <sup>c</sup>	0	ł	ŧ	na	5.9E+03	ı	ı	na	5.9E+03	1	2	1		ı	1	1	}	ł	1	กล	5.9E+03
Methoxychlor	0	1	3.0E-02	na	I	i	3.0E-02	na	ŧ	ì	ļ			ı	1	1	1	ı	3.0E-02	na	:
Mirex	0	ŧ	0.0E+00	na	ı	ļ	0.0E+00	na	\$	ł	ı	ı	<u> </u>	;	t	1	ı		0.0E+00	na	1
Nickel	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	ı	ı	1	1	1	1	1	1	1.0E+02	1.1E+01	na	4.6E+03
Nitrate (as N)	0	1	1	na	ı	1	ı	na	1	1	1	ı	i	1	1	1	i	•	:	na	3
Nitrobenzene	0	ı	I	na	6.9E+02	1	ł	na	6.9E+02	1	ı	1	1	ł	1	1	1	ŧ	ŧ	na	6.9E+02
N-Nitrosodimethylamine <sup>c</sup>	0	1	ı	na	3.0E+01	ı	ı	na	3.0E+01	ı	1	1	1	ı	1	Į.		:	ŧ	na	3.0E+01
N-Nitrosodiphenylamine <sup>c</sup>	0	t	ı	na	6.0E+01	ı	ı	na	6.0E+01	1	I	ı	ŀ	ŧ	f	ł	}	ì	:	กล	6.0E+01
N-Nitrosodi-n-propylamine <sup>c</sup>	0		ŧ	na	5.1E+00	1	ı	na	5.1E+00	ł	ı	1	1	1	1	1			ı	na	5.1E+00
Nonylphenol	0	2.8E+01	6.6€+00	i	l	2.8E+01	6.6E+00	na	ı	ŧ	1	ì	1	ı	ı	1	- 2		6.6E+00	na	ŧ
Parathion	0	6.5E-02	1.3E-02	na	ı	6.5E-02	1.3E-02	na	ı	ŀ	1	ı	ı	ł	1	1	1	6.5E-02	1.3E-02	na	1
PCB Total <sup>c</sup>	0	ı	1.4E-02	na	6.4E-04	ı	1.4E-02	na	6.4E-04	**	ì	ţ	1	ı	1	1	1		1,4E-02	กล	6.4E-04
Pentachlorophenol <sup>c</sup>	0	8.7E+00	6.7E+00	na	3.0E+01	8.7E+00	6.7E+00	na	3.0E+01	ì	1	1	1	ı	ŀ	,	80	8.7E+00 (	6.7E+00	กล	3.0E+01
Phenol	0	t	ł	па	8.6E+05	1	t	na	8.6E+05	Į.	ı	ţ		ŧ	ı		1	ŧ	1	na	8.6E+05
Pyrene	0	ŧ	1	na	4.0E+03	ı	ı	na na	4.0E+03	ţ	ţ	ŧ		ı	ı	£ .	ŀ	ı	i	na	4.0E+03
Radionuclides	0	ł	ī	na	ı	ı	ł	e	1	1	į	ı	,	1	1	i	1	:	ı	na	ŀ
(pCi/L)	0	1	1	na	1	t	ı	na	1	1	1	ì		1	ı	1	-	ŧ	ı	na	ì
(mrem/yr)	O	ı	١	eu Us	4 0F+00	ı	1	e	4 0F+00	1	ı	ı		ı	1	1		ı	:	na	4.0E+00
Radium 226 + 228 (pCi/L)	. 0	ì	ł	na		1	ı		1	:	1	1			ı	1	·	ł	;		; ;
Uranium (ug/l)	0	i		B		ì	1	na	ı	1	,			;	ŧ		1	\$	ş	na	ı
Avia serina hassavatalmitha hasema, endergraver endergrava granitation of serior statements and advantage purk									-												

Parameter	Background		Water Quality Criteria	lity Criteria			Wasteload Allocations	llocations	-	A	Antidegradation Baseline	on Baseline		Ani	Antidegradation Allocations	1 Alfocations		Constitution of the Consti	Most Limiting Allocations	Allocations	
(ug/l unless noted)	Conc.	Acute	Chronic	Chronic HH (PWS)	Ŧ	Acute	Chronic HH (	(PWS)	Ŧ	Acute	Chronic	HH (PWS)	壬	Acute	Chronic	HH (PWS)	Ξ	Acute	Chronic	HH (PWS)	Ŧ
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.0E+00	na	4.2E+03	ł	I	:	1	I	ı	1	1	2.0E+01	5.0E+00	na	4.2E+03
Silver	0	1.0E+00	ı	na	1	1.0€+00	1	na	{	ı	t	1	ı	ı	1	t	ı	1.0E+00	ţ	na	t
Sulfate	0		t	na	1	1	i	e e	1	1	I	ŀ	 I	ı	ı	1	1	;	ı	na	t
1,1,2,2-Tetrachloroethane <sup>c</sup>	0	1	1	na	4.0E+01	ı		e E	4.0E+01	ţ	ţ	1	1	Ę	ŀ	ł	ı	t	ı	na	4.0E+01
Tetrachloroethylene <sup>c</sup>	0	ş	ž	ā	3.3E+01	į	į	na L	3.3E+01	•	ı	1	ı	***	ł	ı	ı	ı	:	na	3.3E+01
Thallium	0	I	t	па	4.7E-01	1	1	па	4.7E-01	ŀ	ı	1	1	ž	ŀ	1	1	ŧ	·	na	4.7E-01
Toluene	0	ł	1	ВП	6.0E+03	ı	l	na	6.0E+03	t	ł	ı	ı	1	ı	ı	ı	i	1	na	6.0E+03
Total dissolved solids	0	**	1	na	ŀ		ı	na	1	ţ	1	i	1	ı	ı	ı	ı	ì	i	na	1
Toxaphene <sup>c</sup>	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	2.8E-03	ž	}	ŀ	<u>'</u>	ı	1	1	1	7.3E-01	2.0E-04	na	2.8E-03
TributyItin	0	4.6E-01	7.2E-02	en G	ı	4.6E-01	7.2E-02	na	1	ı	ı	1	ì	ı	1	t	ı	4.6E-01	7.2E-02	na	;
1,2,4-Trichlorobenzene	0	1	ı	na	7.0E+01	ı	ŧ	na	7.0E+01	ŀ	1	*	ı	;	1	ı	1	1	;	na	7.0E+01
1,1,2-Trichloroethane <sup>c</sup>	0	ŧ	I	na	1.6E+02	1	ı	na	1.6E+02	ŀ	1	ı		ı	ļ	ı	1	1	ŧ	na	1.6E+02
Trichloroethylene <sup>c</sup>	0	ł	1	na	3.0E+02	ŧ	}	na	3.0E+02	1	;	ı	ı	ı	1	1	1	ł	;	na	3.0E+02
2,4,6-Trichlarophenal <sup>c</sup>	0	ł	1	na	2.4E+01	ı	ŧ	na	2.4E+01	;	ı	ı	1	ı	ł	1	ı		;	na	2.4E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	ţ	i	ğ	k 1	ì	t	na	Į.	i	ı	ł	ŀ	ţ	ı	;	ţ	\$	ı	na	ı
Vinyl Chloride <sup>c</sup>	0	ţ	t	na	2.4E+01	ŧ	I	na	2.4E+01	ĭ	ŧ	;	ı	ı	1	ı	l	;	ı	na na	2.4E+01
Zinc	0	6.5E+01	6.6E+01	na	2.6E+04	6.5E+01	6.6E+01	na	2.6E+04	,	ě	*	7.	-	479	***	ı	6.5E+01	6,6E+01	na	2.6E+04

- 1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- 2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
- 3. Metals measured as Dissolved, unless specified otherwise
- 4. "C" indicates a carcínogeníc parameter
- 5. Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
- Antidegradation WLAs are based upon a complete mix.

- 6. Antideg. Baseline = (0.25(WQC background conc.) + background conc.) for acute and chronic
- = (0.1(WQC background conc.) + background conc.) for human health
- Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio 1), effluent flow equal to 1 and 100% mix. 7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and

Note: do not use QL's lower than the	minimum QL's provided in agency	guidance													
Target Value (SSTV)	6.4E+02	9.0E+01	na	3.9E-01	2.5E+01	6.4E+00	2.8E+00	na	3,4E+00	na	4.6E-01	6.8E+00	3.0€+00	4.2E-01	2.6E+01
Metal	Antimony	Arsenic	Barium	Cadmium	Chromium III	Chromium VI	Copper	lron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Zinc

## Public Notice - Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of stormwater into a water body in Caroline County, Virginia.

PUBLIC COMMENT PERIOD: April 7, 2012 to 5:00 p.m. on May 7, 2012

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Stormwater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER:

Arogas, Inc. d.b.a. Mr. Fuel

P.O. Box 580, St. Peters, MO 63376

VA0092649

NAME AND ADDRESS OF FACILITY:

Arogas, Inc. d.b.a. Mr. Fuel 23818 Rogers Clark Boulevard Ruther Glen, VA 22546

PROJECT DESCRIPTION: Arogas, Inc. d.b.a. Mr. Fuel has applied for a new permit for the private Arogas, Inc. d.b.a. Mr. Fuel. The applicant proposes to release storm water at a rate of 0.000524 million gallons per day into a water body. There is no sludge generated at this facility. The facility proposes to release the storm water in the Reedy Creek, UT in Caroline County in the York River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Total Petroleum Hydrocarbons and Naphthalene.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Douglas Frasier

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193 Phone: (703) 583-3873 email: Douglas.Frasier@deq.virginia.gov Fax: (703) 583-3821

## State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

## Part I. State Draft Permit Submission Checklist

Major []

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Minor [X]

Facility Name:	Arogas, Inc. d.b.a. Mr. Fuel
NPDES Permit Number:	VA0092649
Permit Writer Name:	Douglas Frasier
Date:	10 February 2012

Industrial [X]

Municipal [ ]

I.A. Draft Permit Package Submittal Includes:		No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?			X
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?	X		nico and a second

I.B. Permit/Facility Characteristics		No	N/A
1. Is this a new, or currently unpermitted facility?	X		
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?			X
5. Has there been any change in streamflow characteristics since the last permit was developed?			X
6. Does the permit allow the discharge of new or increased loadings of any pollutants?			X
7. Does the fact sheet <b>or</b> permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	Χ		
8. Does the facility discharge to a 303(d) listed water? <b>DOWNSTREAM</b>			X
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit? <b>DOWNSTREAM</b>		Х	
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water? <b>DOWNSTREAM</b>		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?			X
10. Does the permit authorize discharges of storm water?			
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?			X
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?			X

I.B. Permit/Facility Characteristics – cont.		No	N/A
14. Are any WQBELs based on an interpretation of narrative criteria?			X
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		Х	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?	X		
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?			X

## Part II. NPDES Draft Permit Checklist

mixing zone?

## Region III NPDES Permit Quality Review Checklist – For Non-Municipals (To be completed and included in the record for <u>all</u> non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet <b>or</b> permit describe the physical location of the facility, including latitu and longitude (not necessarily on permit cover page)?	de X		
2. Does the permit contain specific authorization-to-discharge information (from where to w by whom)?	here, X		
II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits are less stringent than those in the previous NPDES permit?	that		X
II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?		The second secon	X
b. If no, does the record indicate that a technology-based analysis based on Best Professi Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?	X		
2. For all limits developed based on BPJ, does the record indicate that the limits are consisted with the criteria established at 40 CFR 125.3(d)?	ent X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and / BPJ technology-based effluent limits?	or X		
4. For all limits that are based on production or flow, does the record indicate that the calcul are based on a "reasonable measure of ACTUAL production" for the facility (not design)			X
5. Does the permit contain "tiered" limits that reflect projected increases in production or flo	nancember and the second secon	X	
a. If yes, does the permit require the facility to notify the permitting authority when alternedered levels of production or flow are attained?	nate		X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average and/or monthly average limits?		X	
8. Are any final limits less stringent than required by applicable effluent limitations guidelin BPJ?	es or	X	
II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering	ıg X		
State narrative and numeric criteria for water quality?			
<ol><li>Does the record indicate that any WQBELs were derived from a completed and EPA appr TMDL?</li></ol>			X
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was perfor in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or	a X		

T 1 0 . 1	Limits – cont.	Yes	No	N/A
c. Does the fact sheet present WL. have "reasonable potential"?	A calculation procedures for all pollutants that were found to	o X		
	t the "reasonable potential" and WLA calculations accounte	d		- Commence of the Commence of
for contributions from upstream sources (i.e., do calculations include ambient/background				X
concentrations where data are				
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?		X		
5. Are all final WQBELs in the perm provided in the fact sheet?	it consistent with the justification and/or documentation			X
	long-term (e.g., average monthly) AND short-term (e.g., instantaneous) effluent limits established?			X
	mit using appropriate units of measure (e.g., mass,			Х
	n "antidegradation" review was performed in accordance wit ion policy?	h X		
I.E. Monitoring and Reporting Re	quirements	Yes	No	N/A
**************************************	nual monitoring for all limited parameters?	X	antinous contractor	
	te that the facility applied for and was granted a monitoring			
	specifically incorporate this waiver?	-		
Does the permit identify the physical location where monitoring is to be performed for each outfall?		X		
	Whole Effluent Toxicity in accordance with the State's			X
				************
TF Special Conditions		Ves	No	N/A
I.F. Special Conditions  L. Does the permit require development	ent and implementation of a Best Management Practices	Yes	No	N/A
1. Does the permit require developme	ent and implementation of a Best Management Practices	Yes	No	N/A
<ol> <li>Does the permit require developments (BMP) plan or site-specific BMPs</li> </ol>	s?	X	No	N/A
Does the permit require developmed (BMP) plan or site-specific BMPs a. If yes, does the permit adequate.     If the permit contains compliance	•	X X	No	N/A
<ol> <li>Does the permit require developmed (BMP) plan or site-specific BMPs</li> <li>a. If yes, does the permit adequate</li> <li>If the permit contains compliance deadlines and requirements?</li> </ol>	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulator; ambient sampling, mixing studies, TIE/TRE, BMPs, special	X	No	
1. Does the permit require developme (BMP) plan or site-specific BMP:  a. If yes, does the permit adequate  2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g.,	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulator; ambient sampling, mixing studies, TIE/TRE, BMPs, special	X	No	
1. Does the permit require developme (BMP) plan or site-specific BMP:  a. If yes, does the permit adequate  2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and CM.G. Standard Conditions	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulator; ambient sampling, mixing studies, TIE/TRE, BMPs, special	X X X Y Yes		X
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1. Does the permit require developme (BMP) plan or site-specific BMP:  a. If yes, does the permit adequate  2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and CM.G. Standard Conditions	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or	X X X Y Yes		X
<ol> <li>Does the permit require developme (BMP) plan or site-specific BMPs a. If yes, does the permit adequate 2. If the permit contains compliance deadlines and requirements?</li> <li>Are other special conditions (e.g., studies) consistent with CWA and II.G. Standard Conditions</li> <li>Does the permit contain all 40 CF more stringent) conditions?</li> <li>List of Standard Conditions – 40 CI Duty to comply</li> </ol>	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  FR 122.41 standard conditions or the State equivalent (or FR 122.41 Property rights Reporting Re	X X X Y X Yes X equirements	No	X
1. Does the permit require developme (BMP) plan or site-specific BMPs a. If yes, does the permit adequate 2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and and a conditions.  1. Does the permit contain all 40 CF more stringent) conditions?  List of Standard Conditions — 40 CI Duty to comply Duty to reapply	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or FR 122.41  Property rights Property to provide information  Reporting Rep	X X X X Yes X equirements change	No	X
1. Does the permit require developme (BMP) plan or site-specific BMP:  a. If yes, does the permit adequate  2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and (I.G. Standard Conditions)  4. Does the permit contain all 40 CF more stringent) conditions?  List of Standard Conditions – 40 Cl Duty to comply  Duty to reapply  Need to halt or reduce activity	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or FR 122.41  Property rights Duty to provide information Inspections and entry  Anticipa	X X X Yes X equirements change sted noncom	No	X
1. Does the permit require developme (BMP) plan or site-specific BMP:  a. If yes, does the permit adequate  2. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and (I.G. Standard Conditions)  4. Does the permit contain all 40 CF more stringent) conditions?  List of Standard Conditions – 40 Cl Duty to comply  Duty to reapply  Need to halt or reduce activity not a defense	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or FR 122.41  Property rights Duty to provide information Inspections and entry Monitoring and records  Reporting Re	X X X Yes X equirements change sted noncomes	No	X
<ol> <li>Does the permit require developme (BMP) plan or site-specific BMPs a. If yes, does the permit adequate a. If yes, does the permit adequate deadlines and requirements?</li> <li>Are other special conditions (e.g., studies) consistent with CWA and the conditions.</li> <li>Does the permit contain all 40 CF more stringent) conditions?</li> <li>List of Standard Conditions – 40 CI Duty to comply Duty to reapply Need to halt or reduce activity not a defense Duty to mitigate</li> </ol>	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or FR 122.41  Property rights Duty to provide information Inspections and entry Monitoring and records Signatory requirement Monitor	X X X Yes X equirements change atted noncomes ing reports	No	X
(I. Does the permit require developme (BMP) plan or site-specific BMPs a. If yes, does the permit adequate a. If yes, does the permit adequate a. If the permit contains compliance deadlines and requirements?  3. Are other special conditions (e.g., studies) consistent with CWA and and a studies (b. C. Standard Conditions  4. Does the permit contain all 40 CF more stringent) conditions?  List of Standard Conditions – 40 CI Duty to comply Duty to reapply Need to halt or reduce activity not a defense Duty to mitigate Proper O & M	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or FR 122.41  Property rights Duty to provide information Inspections and entry Monitoring and records Signatory requirement Bypass Complia	X X X Yes X equirements change atted noncomes ing reports ance schedu	No	X
<ol> <li>Does the permit require developme (BMP) plan or site-specific BMPs a. If yes, does the permit adequate a. If yes, does the permit adequate deadlines and requirements?</li> <li>Are other special conditions (e.g., studies) consistent with CWA and the conditions.</li> <li>Does the permit contain all 40 CF more stringent) conditions?</li> <li>List of Standard Conditions – 40 CI Duty to comply Duty to reapply Need to halt or reduce activity not a defense Duty to mitigate</li> </ol>	ely incorporate and require compliance with the BMPs? schedule(s), are they consistent with statutory and regulatory ambient sampling, mixing studies, TIE/TRE, BMPs, special d NPDES regulations?  R 122.41 standard conditions or the State equivalent (or  FR 122.41  Property rights Duty to provide information Inspections and entry Monitoring and records Signatory requirement Bypass Upset  Complia 24-Hour	X X X Yes X equirements change atted noncomes ing reports	No npliance	X

## Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Douglas Frasier
Title	VPDES Permit Writer, Senior II
Signature	Only Iracian
Date	10 February 2012